

### REMARKS

Claims 8-16 and 25-28 are pending and are rejected. Claims 8 and 25 are amended. Reconsideration and allowance of Claims 8-16 and 25-28 are respectfully requested.

#### Claim rejections

Claims 8-11 and 25-28 are rejected under 35 USC §103(a) as being unpatentable over U. S. Patent No. 6,018,524 to Turner et al (Turner) in view of U. S. Patent No. 7,162,481 to Richardson et al (Richardson).

Claims 12-16 are rejected under 35 USC §103(a) as being unpatentable over US Patent No. 6,018,524 to Turner et al (Turner) in view of U. S. Patent No. 7,162,481 to Richardson et al (Richardson), and further in view of U. S. Patent No. 6,735,600 to Andreev et al (Andreev).

Applicant respectfully traverses these rejections, and discusses the independent Claims 8 and 25 individually below.

#### Independent Claim 8

Applicant's Claim 8 (as amended) recites, in part:

forming a hierarchical binary tree structure having root, branch and leaf nodes that define (i) at least a minimum number (N/T) of sub-databases of the forwarding database and (ii) respective bit combinations associated with the sub-databases, wherein each prefix of the N prefixes is stored within one of the sub-databases having an associated bit combination that matches corresponding bits within the prefix, and wherein each of the sub-databases has no more than a predetermined number (T) of prefixes, and at least one of the sub-databases includes a plurality of the prefixes that are not stored in any of the other sub-databases;

Richardson discloses a multi-bit trie structure in which no individual data table stores an entire prefix. The Office Action states that the claim language fails

to explicitly state that an entire prefix is stored in one sub-database with emphasis on the concept of no portions of the prefix being stored in a different sub-database. Accordingly, Applicant's Claim 8 is amended to recite a binary tree structure in which "at least one of the sub-databases includes a plurality of the prefixes that are not stored in any of the other sub-databases," and therefore Claim 8 is patentable over Turner and Richardson.

Claims 9-11 depend from Claim 8 and therefore distinguish over the cited references for at least the same reasons as Claim 8.

Claim 25 is amended to recite limitations similar to those recited in Claim 8, and therefore the comments made above with respect to Claim 8 are equally applicable to Claim 25.

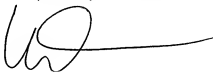
Claims 26-28 depend from Claim 25 and therefore distinguish over the cited references for at least the same reasons as Claim 25.

#### CONCLUSION

In light of the above amendments and remarks, it is believed that Claims 8-16 and 25-28 are in condition for allowance and, therefore, a Notice of Allowance of Claims 8-16 and 25-28 is respectfully requested. If the Examiner's next action is other than allowance as requested, the Examiner is requested to call the undersigned at (408) 236-6646.

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Dated

Respectfully submitted,



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